

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

ATS1577
ABU52

(5)

U.S. DEPT. OF AGRICULTURE
NAT'L AGRIC. LIBRARY
RECEIVED

REPORT NO. 5

JAN 21 '76

PROCUREMENT SECTION
CURRENT SERIAL RECORDS

Cotton Fiber and Processing Test Results

CROP of

1975



Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 October 24, 1975

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1975

Discussion of Test Results

The average fiber length of short staple cottons tested from the Southwest is considerably longer and more uniform than a year ago according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons are coarser and stronger at 1/8-inch gage strength tests. Picker and card waste is lower than a year ago. Yarns spun from these samples show stronger yarn skein strength and higher appearance grades. Yarn imperfections are fewer than a year ago. The average spinning potential yarn number is higher.

Medium staple samples tested from the South Central area are considerably longer and more uniform than at this time a year ago. Cottons are coarser and stronger at both zero and 1/8-inch gage strength tests. Yarns spun from these samples show slightly stronger yarn skein strength than a year ago. Yarn appearance grades were lower. Yarn imperfections are higher. The spinning potential yarn number is lower than last year.

Medium staple samples tested from the Southwest show fiber strength to be weaker at both zero and 1/8-inch gage tests. Picker and card waste is lower than last season. Yarns spun from these samples show higher appearance grades. There are slightly more yarn imperfections than a year ago.

- - - - -

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.^{1/} These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

1/ Summary of Cotton Fiber and Processing Test Results, Crop of 1974,
USDA, AMS, Cotton Division, May 1975.

Table 1.--Cotton: Averages of fiber and processing tests from selected gin points in the United States through October 17, 1975 ^{1/}

Staple group Area, and Crop year	Lots tested	Fiber test results							Processing test results						
		Fibrograph		Mike fine- ness	Fiber strength		S A nonlint	P & C waste	Yarn quality			Spin. Potent.			
		2.5% span	50/2.5 unif.		Pct.	Rdg.			Mpsi	G/tex	Skein str.		Appearance	Imperf- ections	
				Inches			Pct.	Lbs.				Index			No.
Short Staple: Southwest 1974 1975	9	.96	44	4.0	88	21	3.5	6.7	90	104	17	41			
	6	1.01	46	4.4	88	23	3.4	5.8	104	113	11	48			
	3	1.08	46	4.6	86	24	2.5	5.2	98	103	20	61			
	1	1.10	44	4.0	81	22	2.2	4.0	104	100	21	61			
Medium Staple: Southeast 1974 1975	3	1.07	44	4.2	83	23	2.8	4.9	95	110	16	58			
	6	1.11	46	4.8	88	24	2.9	5.1	99	102	19	54			
	27	1.07	45	4.3	84	23	2.8	5.8	102	91	19	60			
	21	1.08	45	4.3	81	22	2.9	4.7	103	99	22	58			
South Central 1974 1975															
Southwest 1974 1975															
Significant dif- ference 2/		0.02	2	0.2	2	1	0.5	0.5	4(22s)	5	2	3			

^{1/} Based on a limited number of samples of modal quality

^{2/} Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States
through October 17, 1975
1/ (Continued)

Staple group, Area, and Crop year	Lots	Fiber Test Results					Processing Test Results									
		Length		Mike	Strength		SA Non- lint	P&C Waste	Comber Waste	Yarn Quality					SPY	
		Span	Unif		Zero	1/8" gage				Strength carded	combed	Appearance carded	Imprfctns card	combed		
		No.	In.	Pct.	Rdg.	Mpsi	G/tx	Pct.	Pct.	Pct.	Lbs.	Lbs.	Indx	Indx	No.	No.
		22s Carded & Combed Yarn														
Long Staple: Southeast	1	1.16	46	4.2	81	21	3.6	8.4	17.9	103	121	110	110	17	11	61
	1	1.15	45	4.1	83	24	2.9	7.7	15.5	106	125	120	120	14	8	71
	1	1.17	46	4.7	90	23	3.1	8.1	19.7	100	123	100	120	18	8	63
	1	1.15	43	4.1	90	25	3.6	8.0	17.7	119	133	120	130	12	6	74
South Central	1	1.17	46	4.7	90	23	3.1	8.1	19.7	100	123	100	120	18	8	63
	1	1.15	43	4.1	90	25	3.6	8.0	17.7	119	133	120	130	12	6	74
	1	1.17	46	4.7	90	23	3.1	8.1	19.7	100	123	100	120	18	8	63
	1	1.15	43	4.1	90	25	3.6	8.0	17.7	119	133	120	130	12	6	74
Significant Difference 2/		0.02	2	0.2	2	1	0.5	0.5	0.5	4(22s)	4(22s)	5	5	2	2	3

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1975

Production Area, Classification &				Fiber Test Results										Processing Test Results - Carded Yarns												
Sample Number				Digital Fibrograph		Mike	Fiber Strength		Elon-gat'n 1/8"	S.A. Non-lint		Color Raw Stock		P & C		Strength		Elongation		Appearance Index		Imprfect'ns				Spin. Poten-tial
				2.5% span	Unif		Zero	1/8" Gage		Pct	No	Gra	Yel	Waste	8s or 74 tx	22sor 27 tx	8s or 74 tx	22s or 27 tx	8s or 74 tx	22sor 27 tx	8s or 74 tx	22sor 27 tx	8s or 74 tx	22sor 27 tx		
No	Grade	Stple		32s																						
Name & Code				In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	No	No	No	Pct	Lbs	Lbs	Pct	Pct	No	No	No	No	No	No		
SOUTHWEST																										
CENTRAL TEXAS																										
BRANDON																										
1	SIM	LT SP	42	31	.95	48	4.2	87	23	6.1	3.3	2	4	100 PERCENT		102	326	7.5	6.4	130	120	14	9	43		
COMMERCE																										
1	MID	31	31	.98	44	4.4	102	24	4.6	3.4	1	4	99 PERCENT		104	327	6.5	5.4	120	110	19	12	43			
WACO																										
2	SIM	41	32	1.03	47	4.7	89	24	5.7	2.6	2	4	100 PERCENT		108	344	6.8	5.6	130	120	16	10	48			

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1975

Production Area, Classification & Sample Number				Fiber Test Results										Processing Test Results - Carded Yarns									
No	Grade	Name & Code	Stple	Digital Fibrograph		Mike	Fiber Strength		Elon-gat'n 1/8"	S.A. Non-Lint	Color Raw Stock		P & C Waste	Strength		Elongation		Appearance Index		Imprfct'ns		Spin. Potential	
				2.5% span	Unif.		Zero Gage	1/8" Gage			Gra	Yel		22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx				
SOUTHEAST																							
SOUTH CAROLINA																							
MAYESVILLE																							
41	1	SIM	36	1.10	44	4.0	81	22	5.7	2.2	2	3	90 PERCENT	37	5.5	4.0	100	60	21	15	61		
SOUTH CENTRAL																							
ARKANSAS																							
KEISER																							
41	1	SIM	36	1.13	44	4.2	85	24	6.6	2.4	2	3	100 PERCENT	39	6.3	4.6	110	60	17	13	69		
LEACHVILLE																							
41	1	SIM	35	1.11	46	4.9	91	24	5.0	2.5	1	3	100 PERCENT	30	4.8	3.4	90	60	18	14	53		
LEACHVILLE																							
41	1	SIM	35	1.08	46	4.9	82	23	6.2	1.9	2	3	100 PERCENT	30	5.3	3.8	110	60	24	18	50		
OSCEOLA																							
50	1	LM PLUS	34	1.08	45	4.7	84	24	5.9	4.0	2	3	100 PERCENT	33	5.3	3.8	90	70	18	16	50		
VICTORIA																							
41	1	SIM	36	1.15	48	5.0	94	24	4.7	3.6	2	3	100 PERCENT	31	4.3	3.4	110	70	17	15	54		
41	2	SIM	35	1.12	46	5.3	93	23	4.6	3.2	2	3	5.7	29	4.8	3.4	100	60	19	16	50		
SOUTHWEST																							
CENTRAL TEXAS																							
AQUILLA																							
51	3	LM	33	1.03	42	3.6	88	22	5.2	5.5	2	3	100 PERCENT	29	5.4	3.5	90	60	22	19	49		
WEST CALIFORNIA																							
SHAFTER																							
31	1	MID 31	36	1.13	48	4.1	101	29	5.1	2.0	1	3	100 PERCENT	49	5.3	4.4	90	60	29	20	76		

Table 4 --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1975

Production Area, Classification & Sample Number				Fiber Test Results										Processing Test Results - Carded Yarns									
				Digital Fibrograph		Mike	Fiber Strength		Elon-gat'n 1/8"	S.A. Non-Lint	Color Raw Stock		P & C Comber Waste	Strength		Elongation		Appearance Index		Imprfect'ns 22s or 27 tx	50s or 12 tx	Spin. Potential	
							Zero Gage	1/8" Gage			Gra	Yel		22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx				
No	Grade	Stple	32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	No	No	Lbs	Lbs	Pct	Pct	No	No	No	No	No		
SOUTHEAST																							
NORTH CAROLINA																							
HARTSVILLE																							
41	1 SLM		36	1.15	45	4.1	83	24	5.4	2.9	3	3	100 PERCENT	31	5.4	4.0	120	80	14	13	71		
													*15.5	125	43	5.9	4.5	120	100	8	3		
SOUTH CENTRAL																							
MISSISSIPPI																							
LAKE CORMORANT																							
41	1 SLM		38	1.15	43	4.1	90	25	5.5	3.6	2	2	100 PERCENT	43	5.8	4.5	120	90	12	10	74		
													*17.7	133	49	6.2	4.9	130	110	6	5		

* Comber Waste and Combed Yarn Data

